

# FIG. 1

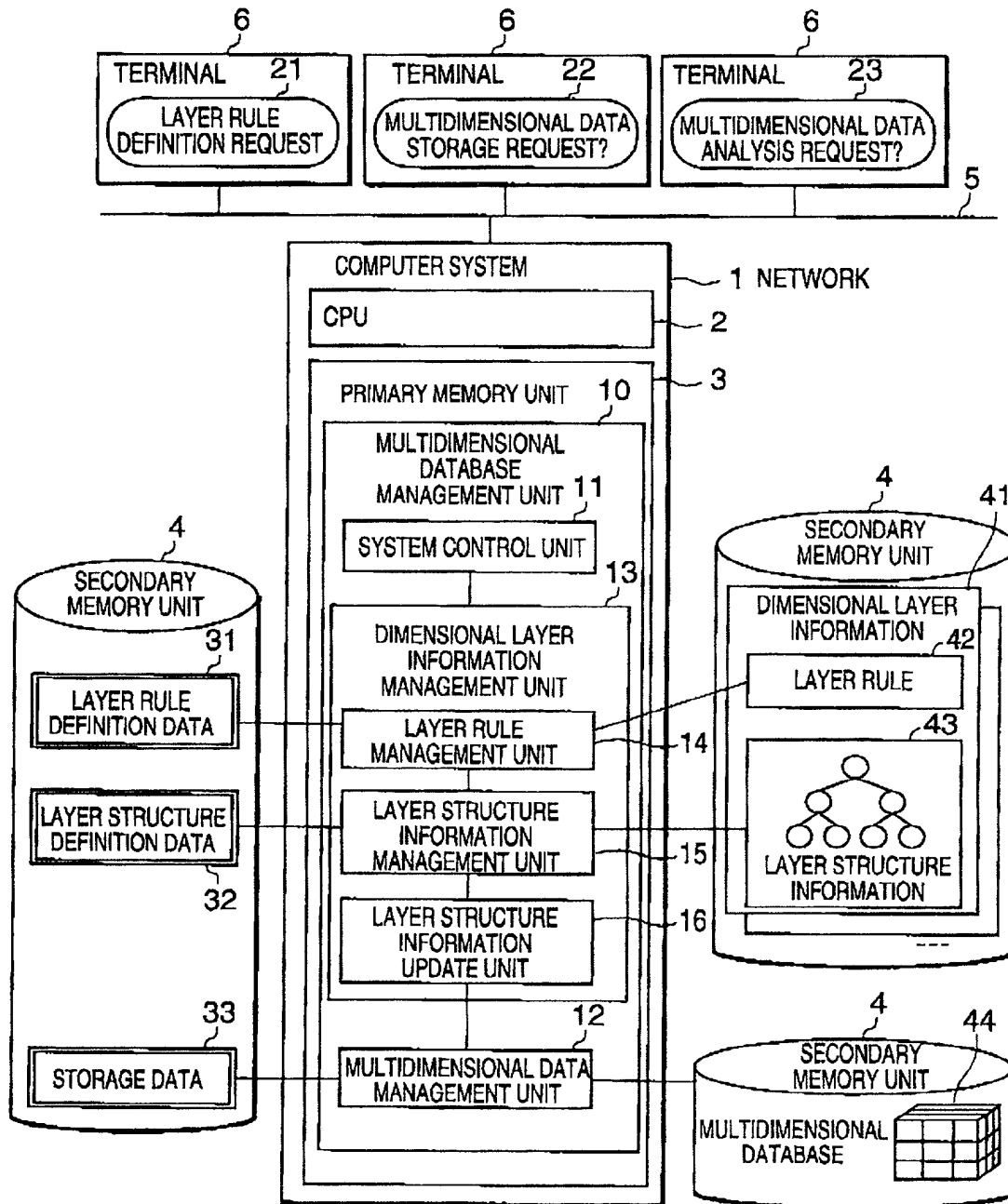


FIG.2

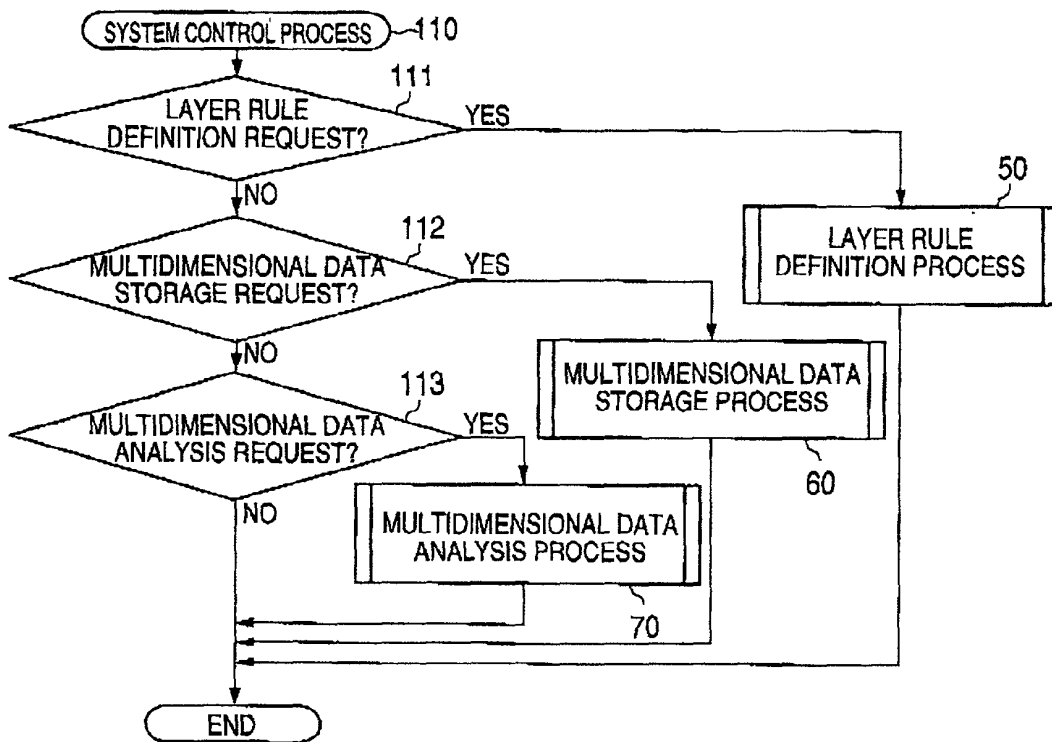


FIG.3

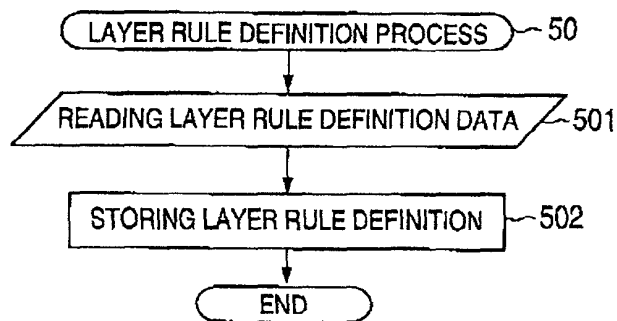


FIG.4

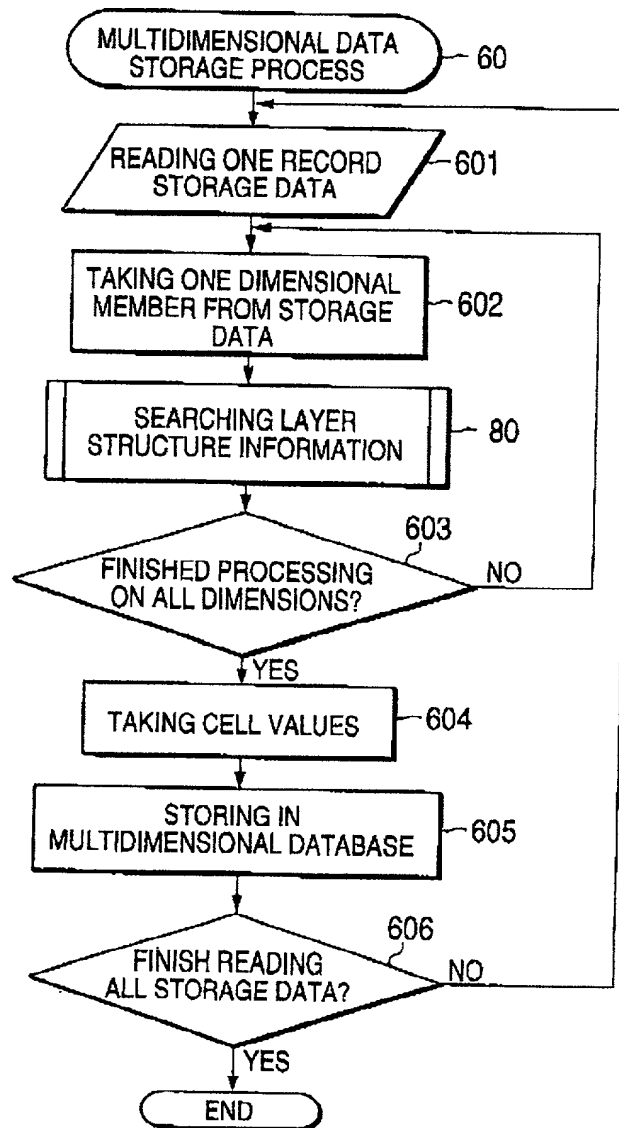


FIG.5

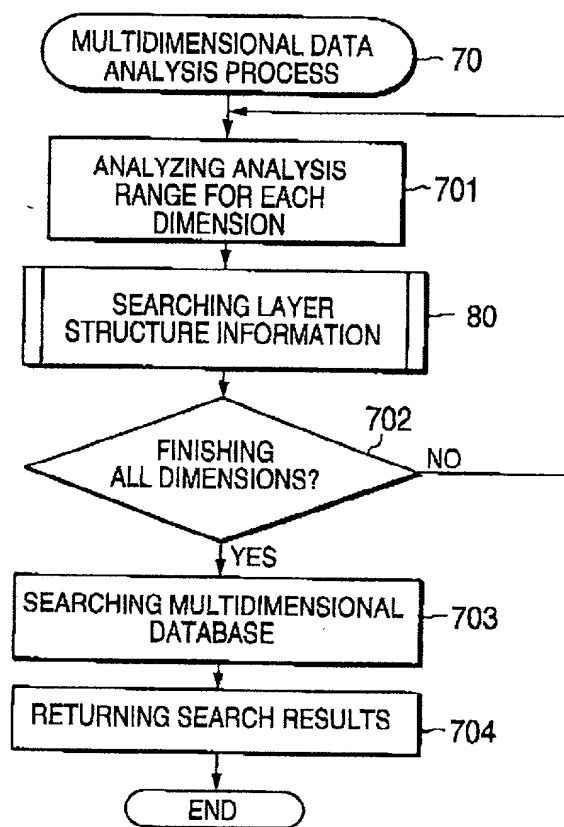


FIG.6

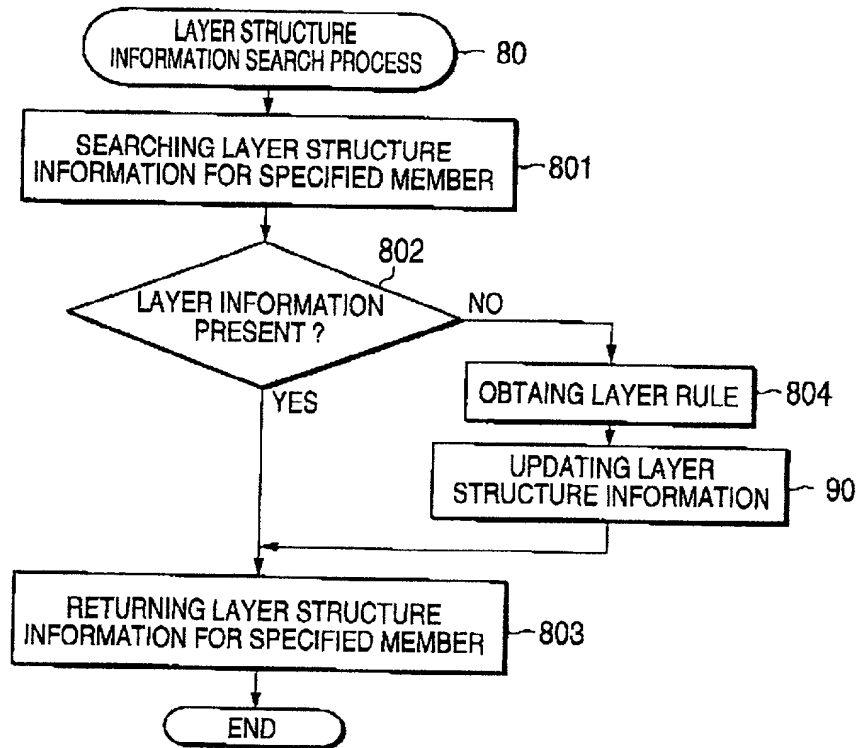


FIG.7

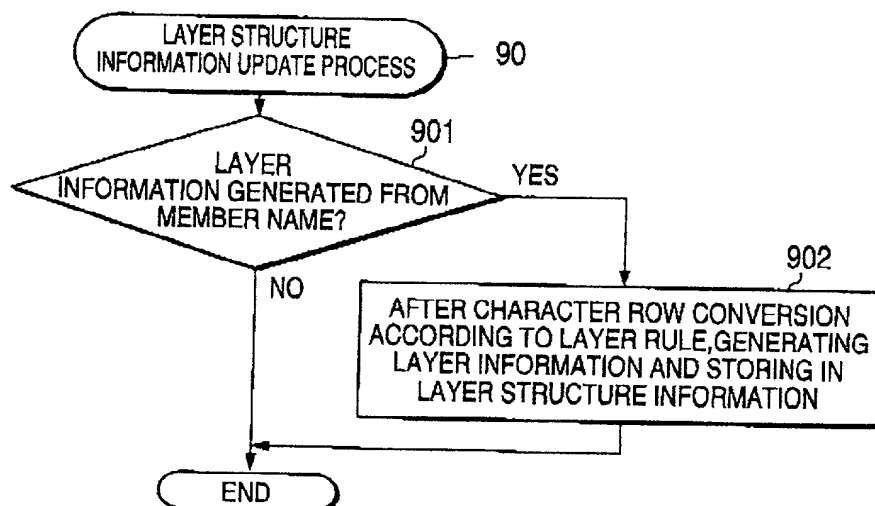


FIG.8

3110  
TIME DIMENSIONAL LAYER RULE DEFINITION DATA

```
#LAYER RULE :  
#AFTER CHARACTER ROW CONVERSION ON MEMBER, OBTAINING LAYER INFORMATION  
  
FROM MEMBER NAME  
LEVEL10= $ MEMBER NAME  
LEVEL11={  
    S/¥(.... ¥)0[123]/¥1Q1/  
    S/¥(.... ¥)0[456]/¥1Q2/  
    S/¥(.... ¥)0[789]/¥1Q3/  
    S/¥(.... ¥)1[012]/¥1Q4/  
}  
LEVEL12={  
    S/¥(.... ¥)..¥1/  
}
```

FIG.9

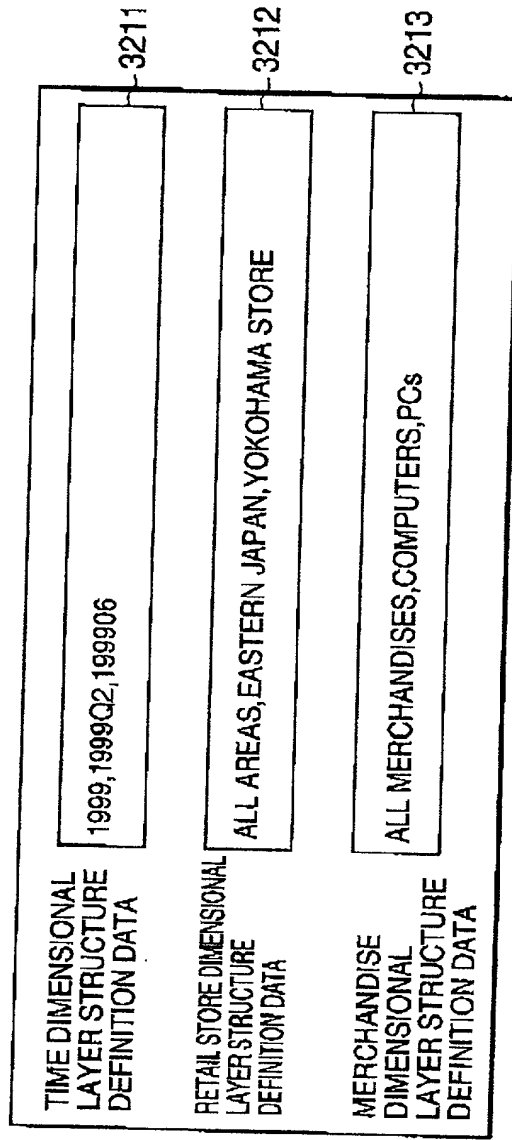


FIG.10

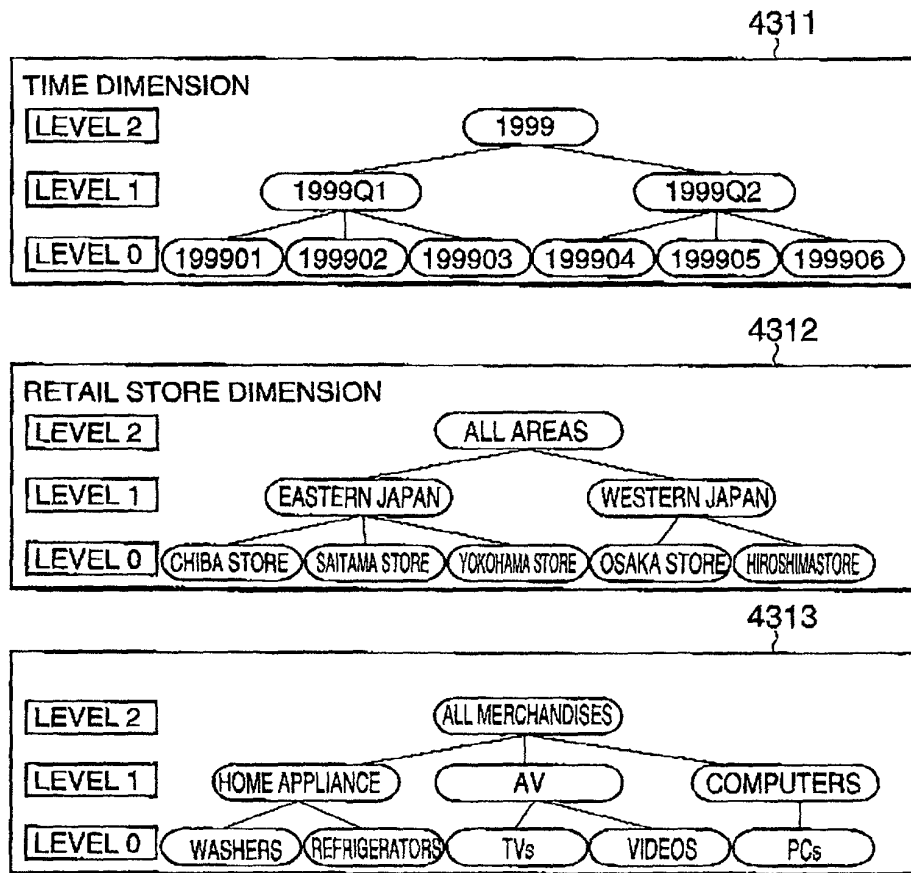




FIG.11

RETAIL STORE DIMENSIONAL LAYER RULE DEFINITION DATA

3120

#LAYER RULE :

#OBTAINING LAYER INFORMATION FROM CSV FORMATTED FILE

FROM FILE,CSV FILE

LEVEL0=COLUMN 3

LEVEL1=COLUMN 2

LEVEL2=COLUMN 1

FIG.12

3126

ALL AREAS,EASTERN JAPAN,CHIBA STORE

ALL AREAS,EASTERN JAPAN,SAITAMA STORE

ALL AREAS,EASTERN JAPAN,YOKOHAMA STORE

ALL AREAS,WESTERN JAPAN,OSAKA STORE

ALL AREAS,WESTERN JAPAN,HIROSHIMA STORE

FIG.13

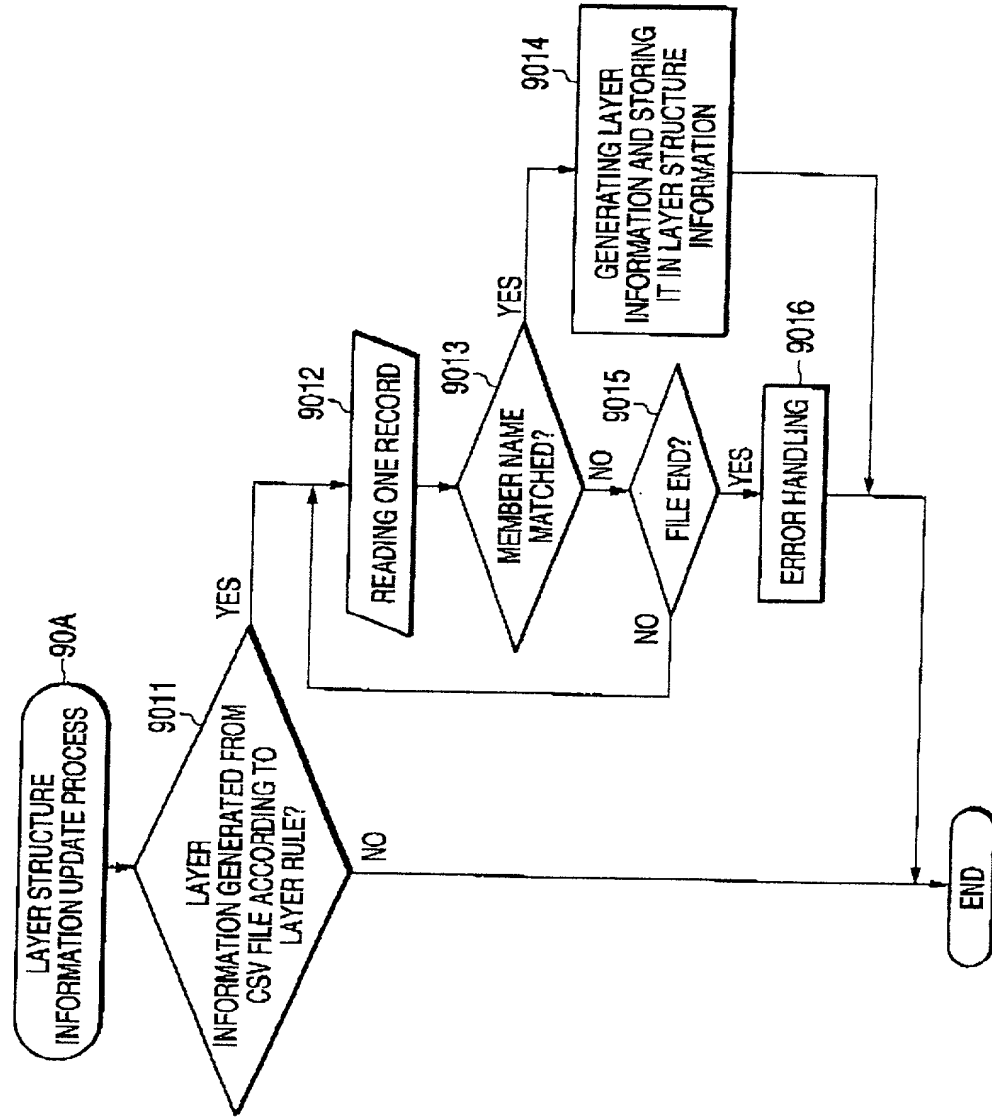
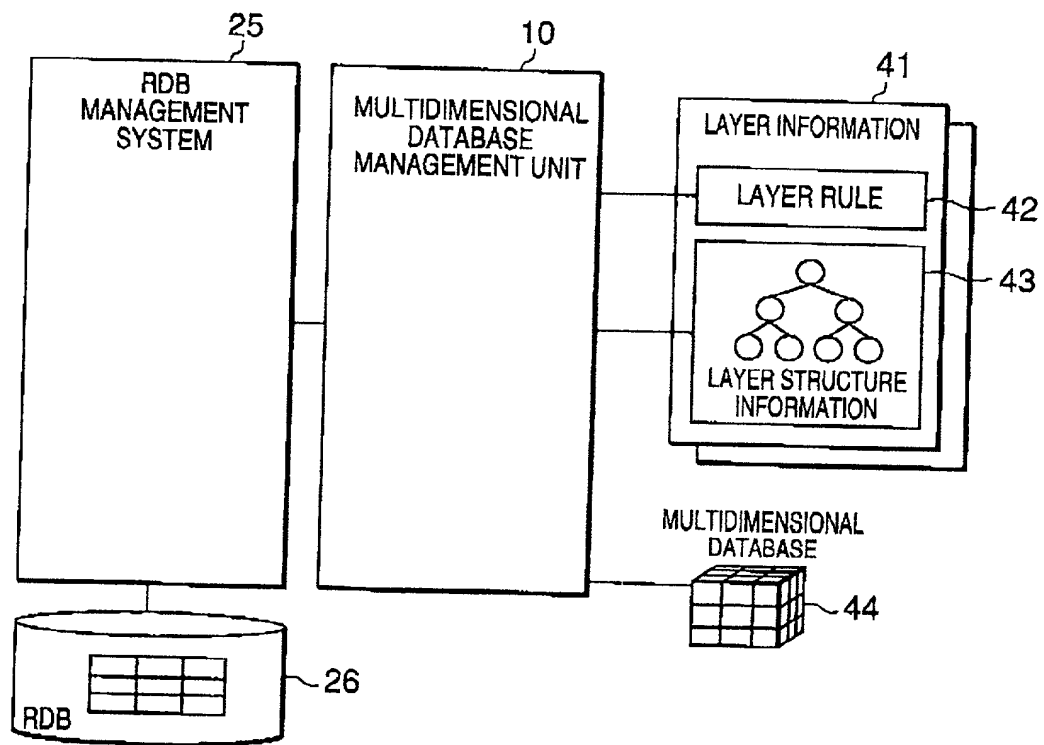


FIG.14



# FIG.15

3130

<p>MERCHANDISE DIMENSIONAL LAYER RULE DEFINITION DATA</p> <p>#LAYER RULE : RDB PRODUCT MASTER LIST</p> <p>#OBTAINING FROM COL1,COL2</p> <p>FROM RDB PRODUCT MASTER LIST</p> <p>LEVEL 0=SMALL CLASSIFICATION</p> <p>LEVEL 1=LARGE CLASSIFICATION</p> <p>LEVEL 2="ALL MERCHANDISE"</p>
--

# FIG.16

CONTENT OF RDB PRODUCT MASTER TABLE

LARGE CLASSIFICATION	SMALL CLASSIFICATION
HOME APPLIANCE	WASHERS
HOME APPLIANCE	REFRIGERATORS
AV	TVs
AV	VIDEOS
COMPUTERS	PCs

261

FIG.17

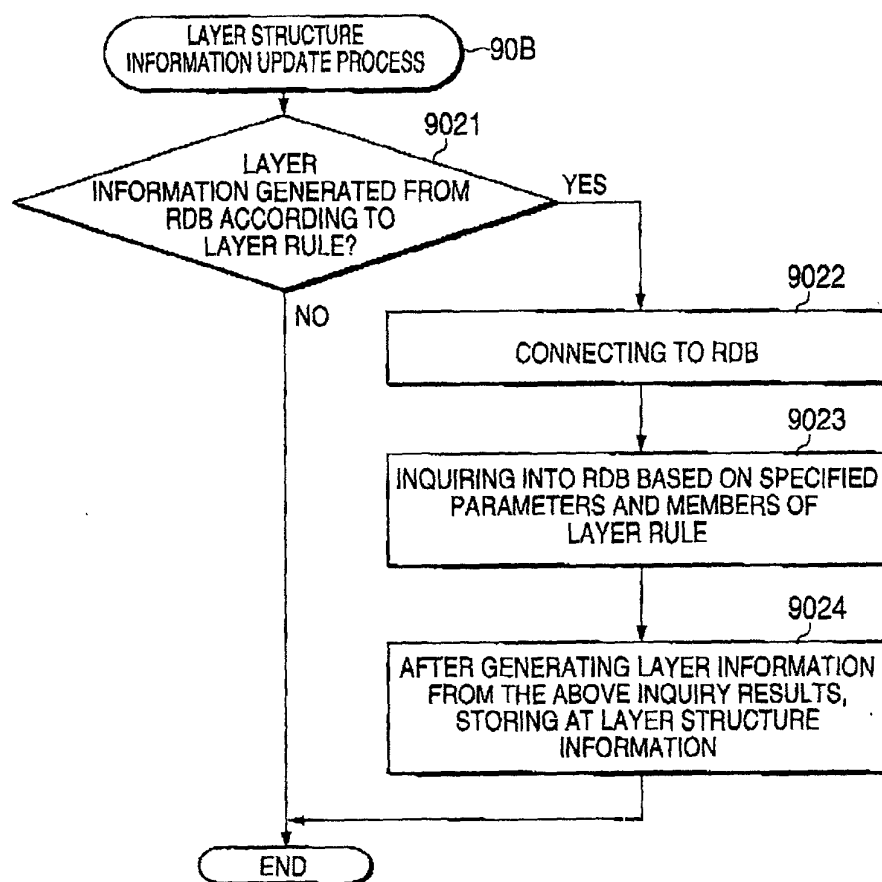


FIG.18

4310

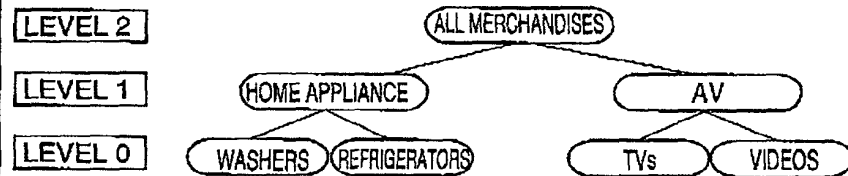
TIME DIMENSION  
(WITHOUT LAYER STRUCTURE INFORMATION)

4302

RETAIL STORE DIMENSION



4303



4304

UNIT DIMENSION(WITHOUT LAYER)

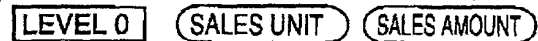


FIG.19

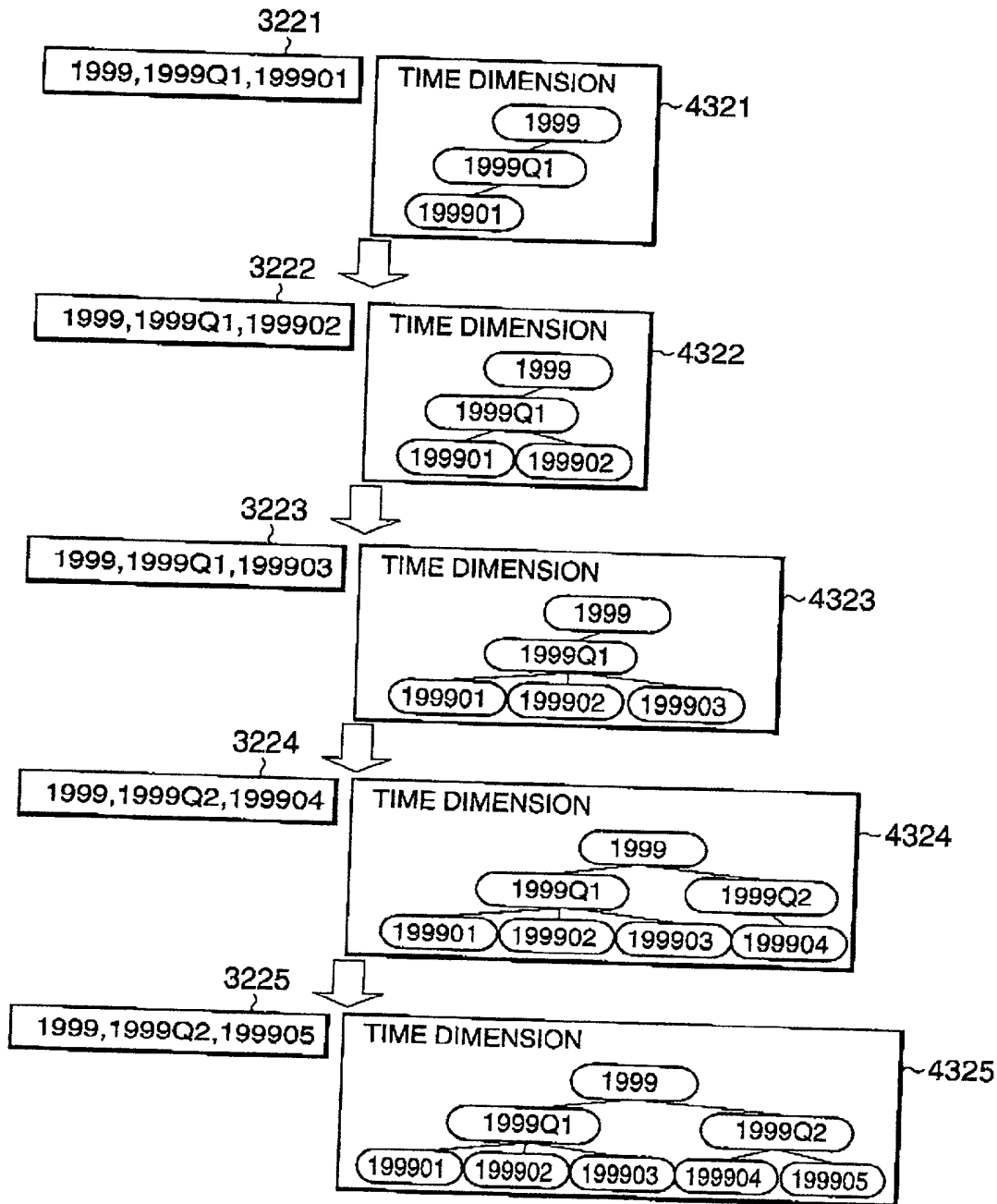


FIG.20 PRIOR ART

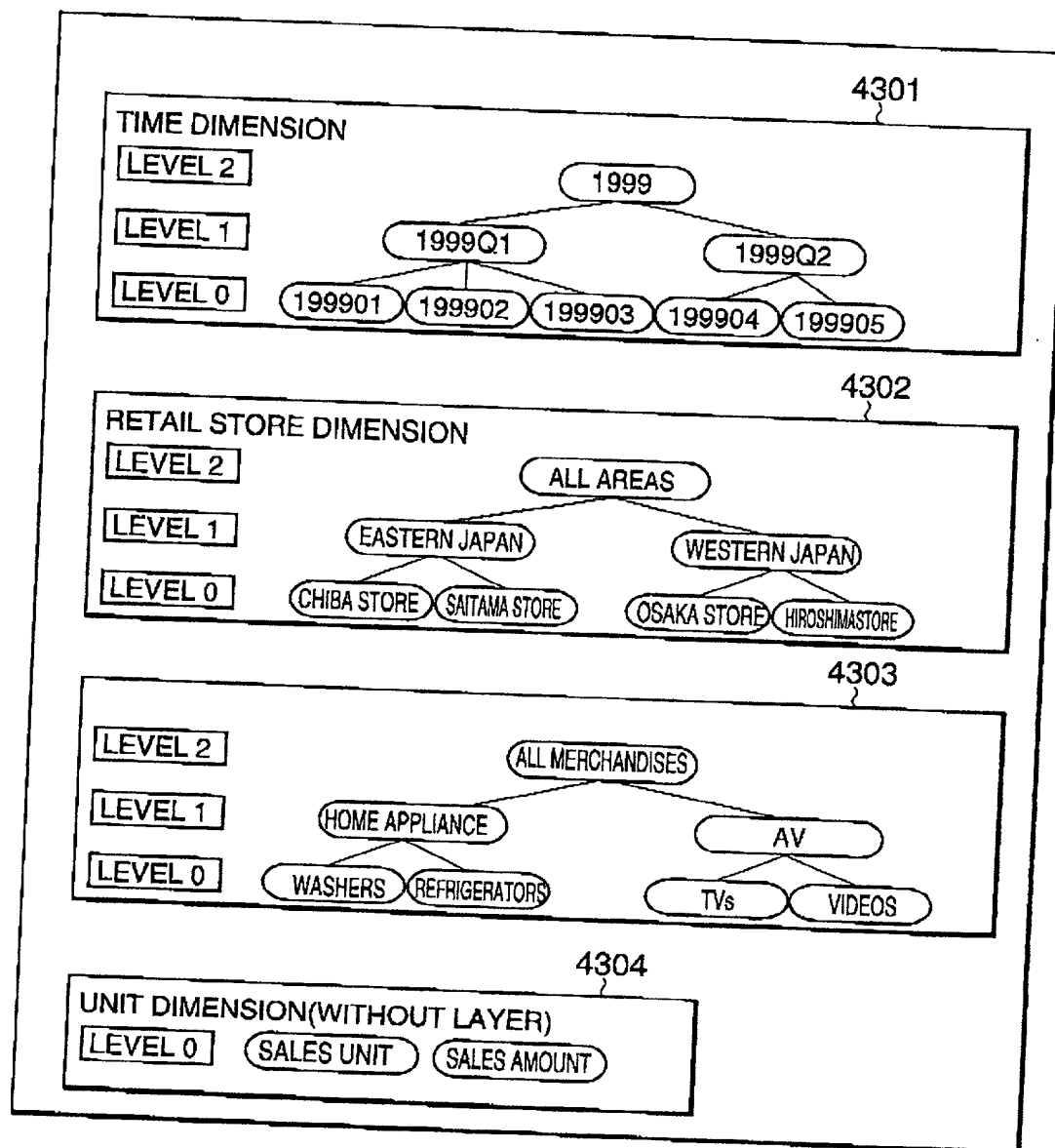
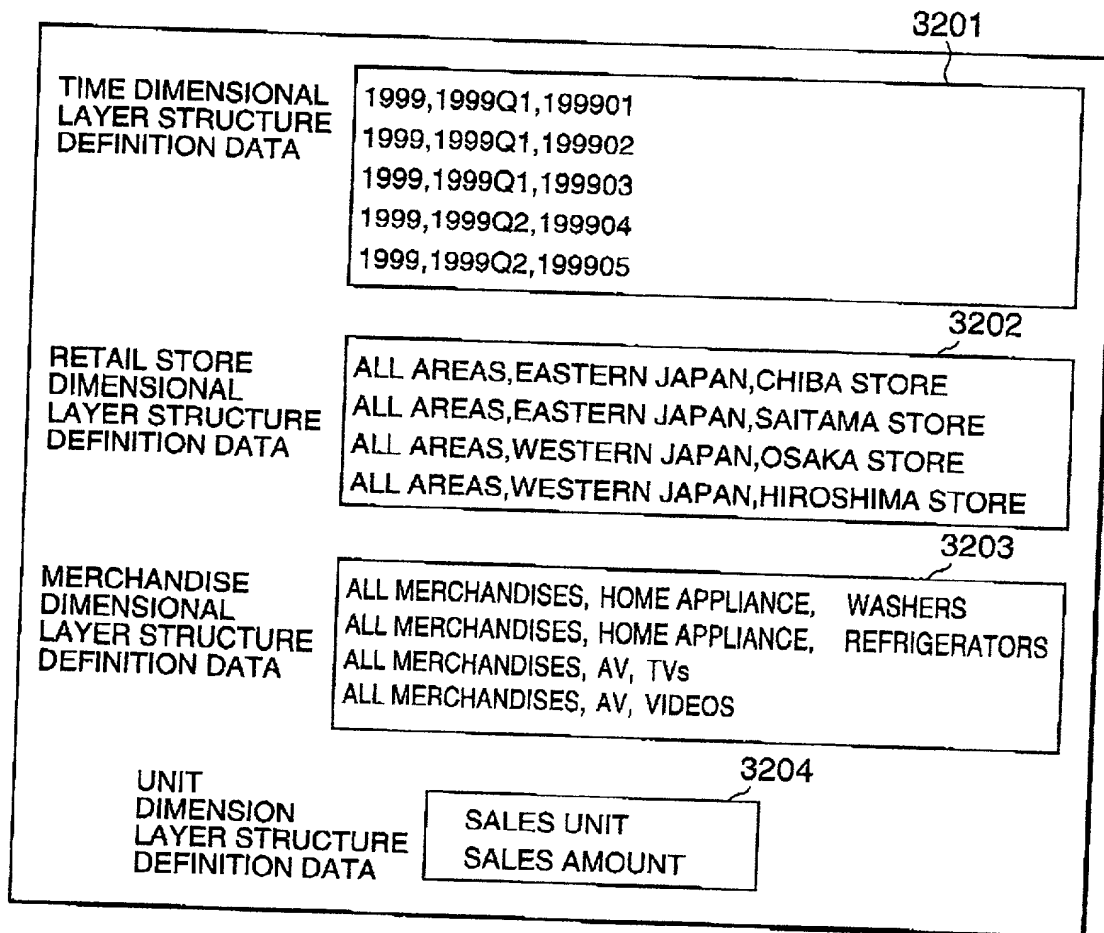




FIG.21 PRIOR ART



## FIG.22 PRIOR ART

3301

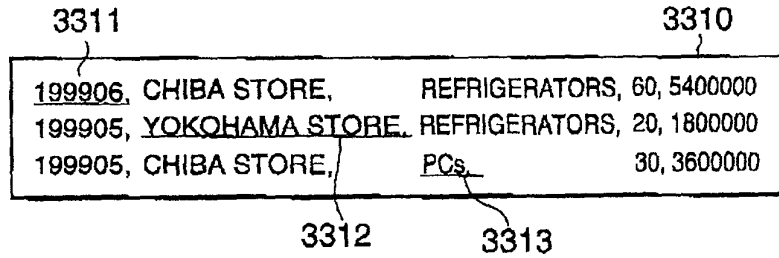
199901, SAITAMA STORE,	TVs,	22, 2420000
199901, OSAKA STORE,	REFRIGERATORS,	15, 1350000
199902, HIROSHIMA STORE,	VIDEOS,	42, 2940000
199902, SAITAMA STORE,	WASHERS,	21, 1680000
199903, CHIBA STORE,	VIDEOS,	33, 2310000
199904, HIROSHIMA STORE,	REFRIGERATORS,	18, 1620000
199905, CHIBA STORE,	TVs,	45, 4950000

⋮

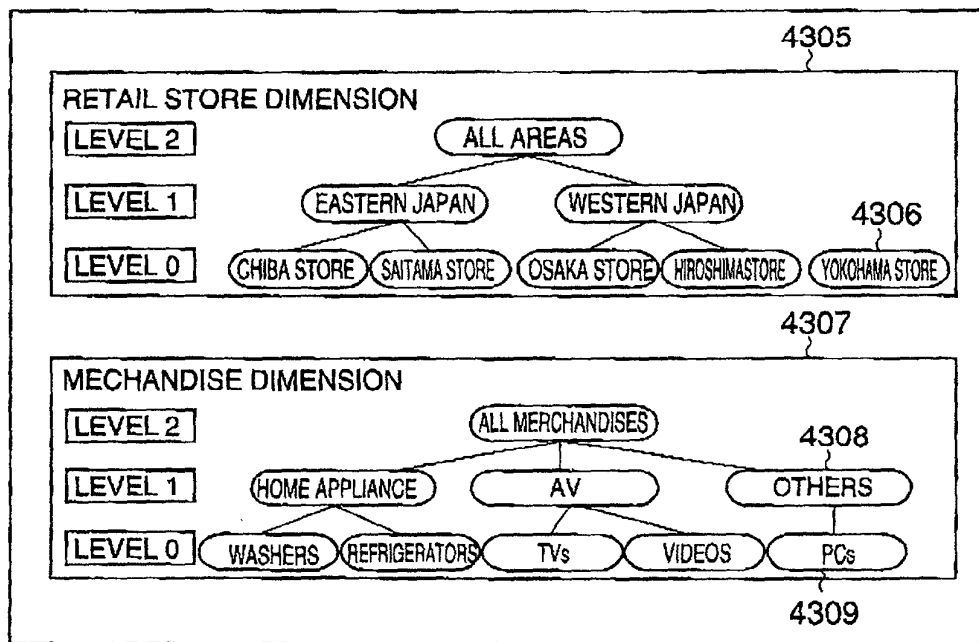
FIG.23 PRIOR ART

MERCHANDISE DIMENSION		TVS				
UNIT DIMENSION		SALES AMOUNT				
TIME DIMENSION						
1999						
RETAIL STORE DIMENSION		1999Q1		1999Q2		
		199901	199902	199903		
		199904	199905			
CHIBA STORE	1100000	330000	770000	2200000	1760000	3960000
SAITAMA STORE	990000	990000	660000	2640000	660000	4290000
EASTERN JAPAN	2090000	1320000	1430000	4840000	1760000	8250000
OSAKA STORE	1100000	1100000	1100000	3300000	1100000	4400000
HIROSHIMA STORE	330000	550000	1100000	1980000	1100000	3740000
WESTERN JAPAN	1430000	1650000	2200000	5280000	1210000	8140000
ALL AREAS	3520000	2970000	3630000	10120000	2970000	16390000

# FIG.24 PRIOR ART



# FIG.25 PRIOR ART



# FIG.26

## RETAIL STORE DIMENSION LAYER DEFINITION DATA

#MAIN LAYER RULE: #SEQUENTIALLY APPLYING SUBRULES APPLYING SUBRULE STORE_RULE1 APPLYING SUBRULE STORE_RULE2	3140
#SUB LAYER RULE :STORE_RULE1 #FROM CSV FILE,OBTAINING LAYER INFORMATION FROM FILE,CSV FILE1 LEVEL 0=COLUMN 3 LEVEL 1=COLUMN 2 LEVEL 2=COLUMN 1	3141
#SUB LAYER RULE:STORE_RULE 2: #AFTER CHARACTER ROW CONVERSION ON RETAIL STORE, OBTAINING LAYER INFORMATION FROM MEMBER NAME LEVEL 0= \$ MEMBER NAME LEVEL 1={ S/¥(.JAPAN¥). \$/¥ 1/ } LEVEL 2={ ALL SALES TERRITORIES }	3142

# FIG.27

3340

199901, EASTERN JAPAN SAPPORO STORE, TVS,17, 1870000  
199902, HIROSHIMA STORE, VIDEOS, 42, 2940000  
199903, EASTERN JAPAN SAPPORO STORE, REFRIGERATOR,15,1350000

FIG.28

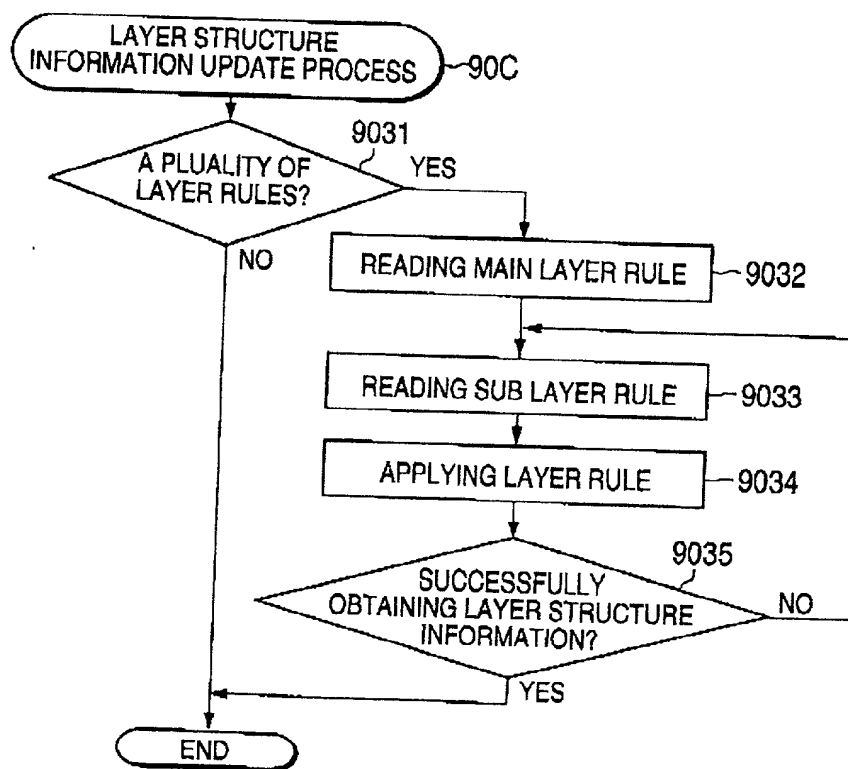


FIG.29

